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ABSTRACT

This paper poses a systematic change process for secondary schools that will enable them to achieve individualized and personalized learning for students. Included in the process are a perspective on change, planning issues and elements, a strategy for planning, a target/timeline framework, and a sequence for change. Finally, a pupose-oriented target secondary school is presented. It provides an idealized framework for moving toward individualized and personalized learning, as well as delineating possible procedures for operationalizing the target school. (Author)

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Theoretical Paper No. 67

AN ALTERNATIVE APPROACH TO SYSTEMATIC EDUCATIONAL CHANGE

by

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Report from the Project on
Models for Individually Guided Education-Secondary

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ABSTRACT

This paper proposes a systematic change process for secondary schools that will enable them to achieve individualized and personalized learning for students. Included in the process are a perspective on change, planning issues and elements, a strategy for planning, a target/timeline framework, and a sequence for change. Finally, a purpose-oriented target secondary school is presented. It provides an idealized framework for moving toward individualized and personalized learning, as well as delineating possible procedures for operationalizing the target school.

I

INTRODUCTION

The task of the secondary school in the United States is to provide society with people who have skills, perceptions, and attitudes necessary for cooperation and involvement in political, social, and economic endeavors. The secondary school should provide citizens who strive for a better world and greater human dignity for all. While the fulfillment of this task is necessary for society to effectively function, it is apparent that secondary schools are a long way from achieving their goal.

Recently, five national commission reports (Brown, 1973; Coleman, 1973; Flanagan, 1975; Martin, 1975; & Tyler, 1974) have enunciated a demand for new practices and programs in secondary schools and claimed that a variety of organizational and instructional changes are necessary if secondary schools are to successfully attack their problems. Common to all of these reports is a call for more flexibility in providing alternative programs that recognize and deal with secondary school students' differing needs, interests, backgrounds, and learning styles. There is agreement that the present curriculum structure is serving a limited number of students. It continues to develop only a mythical, average or gifted student and to isolate youth from other institutions, age groups, and experiences within the political-social-economic structure of the country.

However, despite the criticism of present practices, little or no attention is given to the difficulties involved in changing such a complex institution as the secondary school. Alternative programs are suggested as necessary, but systematic procedures for ways to go about the determination of new plans and acheivement of new purposes remain unspecified. While the goal of individualized and personalized learning is proposed as desirable, no mention is made of a systematic change process to reach this goal. How decisions regarding educational goals and programs should be made, who should be involved in making these decisions, how our knowledge about learning and organization should best be utilized, what constitutes a comprehensive solution, and who is responsible for continued design and implementation of future educational operation are questions that need specific procedural answers if secondary schools are to acheive their goal.

REDEFINING SECONDARY SCHOOL PROGRAMS

To begin to specify a framework and a series of procedures for systematic educational change, it is necessary first to consider the question, Why should secondary schools change? Even though many commissions recommend change, a perspective on such change is desirable in order to develop a basis for subsequent planning.

Conditions and circumstances inevitably change over time with the discovery of new knowledge or technologies, the deterioration of existing programs and procedures, and the emergence of differing priorities and needs. Acceptance of change as a constant force has implications for program planning. As was pointed out by Toffler (1970, 1974) and other futurists, constant change if left unattended quickly leads to future shock. This phenomena not only occurs in our society but also in the programs and procedures that are operating in our secondary schools. Even if one assumes that a particular secondary school is currently operating programs which meet the specific needs of each student, over time a redefinition of those programs is essential.

For this redefinition, a continuum of alternative approaches to secondary school programs can be characterized. One end is grounded in a negation of the concept of change, either by refusing to recognize that change is taking place, or by recognizing it only in the sense of responding in a reactive, crisis-oriented mode. This is typical of the problem-solving format used in many schools where needs are identified and special programs are developed and installed according to a "bits and pieces" approach. This approach undoubtedly provides some relief from the problems that arise. The other end is grounded in the concept of change simply for the sake of change. Here change is seen as a force to create new situations. A recognition of problems exists and innovative interventions are proposed to move schools along some ill-defined though often predetermined path.

This paper proposes a third, intermediary approach: Accept change as a constant. Prepare for inevitable changes through ongoing, systematic efforts to search for solutions to problems before they must be dealt with in a crisis-oriented mode. In this way one can move from a reactive mode to a proactive mode in an attempt to shape the flow of changes that come about. Such a search for solutions places schools in a positive position for confronting the future while keeping a balance by maintaining current success-producing operations. Many of the programs and ideas that are now ongoing in the schools do not have to be totally modified or discarded and can form the base for an effective continuing change and improvement program for a future-oriented secondary school.

II

PLANNING FOR SYSTEMATIC CHANGE

ISSUES

Most people accept the notion that planning is necessary and beneficial in defining a direction and carrying out activities. However, what do we really mean by saying planning is important? Are there definable concepts, procedures, and approaches that can be used or is it just something that anyone can do which requires no special training?

Planning can be a defined and formulated activity. It can be specified in terms of a series of process-oriented procedures that enable groups of people to search for innovative and effective solutions, and obtain results to avoid the problems of future shock. Finally, planning can be the key to building a systematic change process for schools to achieve personalized learning for students and a means whereby students learn how to plan and develop their own changes.

Within the framework of systematic educational change, planning addresses five issues:[1] (1) the strategy to be followed: "What do I do to plan, to individualize, to develop students, etc.?" (2) the framework for organizing necessary specifications: "How do I do it?" (3) the involvement of necessary people: "Who do I do it with?" (4) the role of organized knowledge: "What practices and procedures do I use?" and (5) the need for continuous change: "How do I improve what I do?"

These issues encompass the necessary skills to plan continuously (develop, maintain, and dynamically update) for systematic change. They are comprehensive and interrelated, providing a conceptual framework as well as specific procedural activities for planning. The specifics of the five issues are briefly discussed as follows:

A Purpose-Target-Results (PTR) strategy for seeking a solution to a problem. This strategy is defined by procedural guidelines that cover the following five phases of action: (1) Determine necessary purpose from a hierarchy of purposes, (2) generate purposeful and ideal solutions, (3) organize a feasible ideal target for regularities, (4) detail a recommended solution based on the target, and (5) implement the planned solution. The strategy is flexible, interactive, and capable of recycling through previous phases as required. It provides

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[1] These five issues are modifications of aspects of planning discussed in detail in Nadler (1970).

a guide for the entire problem-solving process to acheive the maximum results from any effort.

A solution framework. The solution framework is an organizing matrix that identifies all aspects which should be considered in arriving at the solution to any problem. It is a prescriptive framework consisting of eight system elements described in six dimensions: an overview of this framework is given in Figure 1. It provides a convenient format for guiding planning as the strategy phases are followed and ensures that important considerations will not be omitted and possible consequences will not be ignored. Complex planning can be handled effectively and completely by appropriately interrelating several of these solution framework matrices.

Organized knowledge, models and techniques. This issue is concerned with the introduction of new or innovative practices only in response to a specifically identified problem or need indicated by the strategy and the people involved, not in response to problem areas where previous techniques or solutions can be applied. Effective planning does not begin with new knowledge, models, or techniques; rather, it first determines the purpose to be acheived, the information needed, and the direction to be taken before deciding how to employ the available knowledge, models, or techniques.

Involvement. This issue consists of a philosophy and a set of guidelines that are integrated into the PTR strategy to ensure that the most effective and efficient solution is actually implemented. Finding a solution to a problem and obtaining acceptance of the solution for it from superordinates and from those who would implement it depends on appropriate and meaningful involvement of people in the planning process. A change agent acts as a process facilitator--that is, a catalyst and coordinator. By actively involving personnel in planning to determine the solution to a problem, a stronger commitment to the proposed solution is probable.

A program of continuing change and improvement. The first four issues are sufficient for finding a situation-specific solution to a problem. However, in order to deal with the notion of constant change, they need to be integrated into a continuing search for solutions. Each school ought to establish a planning program that facilitates the search for solutions to problems arising from constant change. Unfortunately, people often believe that today's satisfactory solutions will also suffice for tomorrow. This attitude often leads to a cyclical pattern of "patching up" old situations until a crisis emerges which requires large amounts of energy and time, and frequently results in the application of another patch. The authors' planning approach emphasizes solutions that achieve a specified purpose in order to break the cycle. Schools need to develop a planned program of periodic review and redesign, even when they are performing very well. A solution or plan must be regarded as transitory, suitable only at the time of its definition. To this end the correction of difficulties and development of solutions to emerging problems can best be achieved through a continuing change and improvement program.

SYSTEM DIMENSIONS

SYSTEM ELEMENTS

	FUNDAMENTAL basic characteristics system will have	MEASURES how much, when, how many, goals, criteria, number, time, etc.	INTERFACE how it relates to other elements or systems	EVALUATION how it will be assessed to see if constraints met	MANAGEMENT how it will be organized and controlled	FUTURE STATE anticipated changes in system characteristics
PURPOSE primary focus, aim or concern						
OUTPUTS that which results from processing by the SEQUENCE	*must be such that purpose is achieved*					
INPUTS that which is to be processed within the SEQUENCE						
SEQUENCE actions or steps for processing INPUTS into OUTPUTS						
SETTING the physical, social and attitudinal environment of the system						
INFORMATION CATALYSTS sources of information: books, films, etc.						
HUMAN AGENTS people needed to operate the system						
PHYSICAL CATALYSTS necessary equipment, supplies and facilities						

CATALYSTS AND AGENTS

aid in processing INPUTS into OUTPUTS without becoming part of the OUTPUTS

Figure 1. Solution framework.
(Adapted from Nadler, 1975a, p. .)

PHASES OF THE PLANNING STRATEGY

The five issues discussed above, when interrelated and taken as a whole, describe the authors' approach to planning. The backbone of this view of planning is in the five phases of the strategy. These phases are basically procedural descriptions of what the facilitator does when confronted with statements such as "We have to develop a plan for ---," or "We have to find a specific solution to the problem of ---. What do we do?"

Phase I--Establish a Direction

In this phase, a process facilitator and a planning group determine a purpose for the program or problem at hand. This purpose is then placed in the context of broader, more encompassing purposes by considering what the reasons are for the original purpose; what purpose will this purpose achieve? From the resultant hierarchy, a focal purpose for the planning effort is selected. Next a series of outcomes is defined. That is, the group lists specific goals and objectives that clarify what it means to achieve the selected purpose. These goals and objectives, also called measures of effectiveness, are used to evaluate the alternative solutions which are proposed, and subsequently to determine whether the installed solution has accomplished its intended purpose.

Phase II--Generate Possible Solutions

Working with the focal purpose, the planning group uses various brainstorming, creativity, and nominal group processes to identify a variety of ways, as ideal and creative as possible, in which the selected purpose might be attained. Various techniques are employed to aid the planning group in generating as many alternatives as possible. Key to this phase is the question of "How can the purpose best be achieved?"

Phase III--Organize the Best Solutions into a Target

In this phase, the variety of ways of achieving the purpose generated in Phase II are categorized and arranged into possible target models. A feasible ideal target will achieve the purpose for the regularity conditions (those that occur most frequently or are most important). The measures of effectiveness generated in Phase I are utilized to select the best target which becomes the guiding framework for Phases IV and V, as well as for the subsequent management of the installed system.

Phase IV--Detail the Target into a Recommended Solution Plan

In this phase, the planning group or subgroups add the details and irregularities needed to deal with all the reality conditions. The result of this phase is a recommended solution detailed to the degree necessary for testing and implementation. A complete review of the plan up to this point is also an integral part of this phase.

Phase V--Install and Implement the Planned Solution

This phase involves the usual activities required in implementing any new or revised plan: training, purchasing or developing necessary materials and equipment, debugging, installation and establishment of performance measures.

A TARGET PROGRAM/TIMELINE FRAMEWORK

The general strategy outlined above is necessary for planning to ensure high quality solutions, and to be acceptable to the people who must approve and use them. An important consideration is that through a planning strategy, a target program is developed which can serve, over time, to guide effort and focus attention upon the desired results. Having people effectively define a target--a description of what ought to be--will keep efforts moving in a positive direction over time, i.e., toward the target.

The idea of a target program and the concept of time can be formalized to demonstrate how it is possible for secondary schools to begin where they are at the present and move, over time, through a systematic change process. To do this, two key concepts are helpful: the solution framework and the concept of a timeline. As stated earlier, the solution framework (an 8 x 6 matrix) provides a means by which any program can adequately be described. In fact, the matrix can serve to describe the target program when the appropriate details are filled in for each cell in the matrix. Although time aspects are included in various parts of the matrix, explicit treatment, the passage of chronological time in the form of a timeline, also is necessary. The timeline is important for it enables one to gain a better understanding of the sequence of events involved in a systematic change process.

Figure 2 demonstrates schematically the relationship between the target program and the concept of time used in the planning process. A represents the timeline, B arbitrarily locates the present. Positions C, B, and E show that the system matrix idea could describe how the program was (C), how the program is now (B) and how it ought to be (E). Thus E represents the target program.

The systems matrix affords a way to describe a particular program at a particular point in time and thus represents a static or snapshot view. However, the important aspect is not a static view, but rather

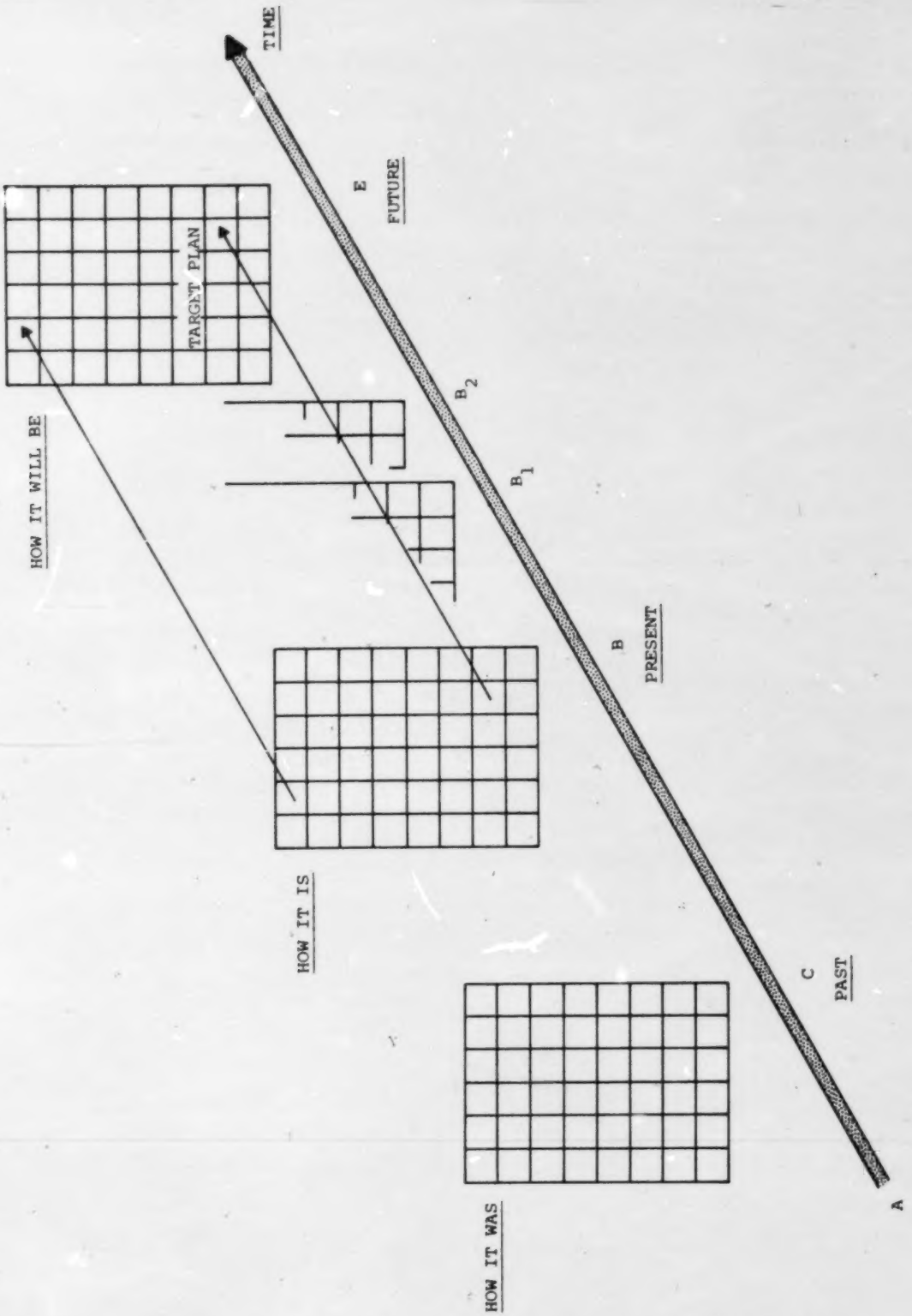

Figure 5. Target and time line concept of planning for the future.

the changing and dynamic nature of the program and its relation to the target program which serves as a guide to development, e.g., points B_1 and B_2. As the school moves through time from B to E, the target program specifies a goal to be reached by working with and consequently modifying the present program.

The focus of secondary schools should be on E--how the school ought to be. Having schools themselves, through a planning strategy and process, formulate appropriate future targets and then work towards these targets over time is the systematic change mode. Further, the concept of a target plan integrated with work toward that target and subsequent modification of the target over time, say at point B_2 so a new target at E_1 is defined, forms the core of a continuing change and improvement program that is necessary for systematic change.

A SEQUENCE FOR CHANGE

To deal with systematic change we have proposed a perspective, set forth relevant issues, discussed a procedural strategy, and integrated the strategy into a target program/timeline framework. In this section, a generalized sequence of change for secondary schools is described. Five stages are outlined to give direction for a school wishing to move on systematic change.[2]

The stages are represented graphically in Figure 3 and consist of: (1) an awareness stage; (2) a commitment stage; (3) a changeover stage; (4) a refinement and implementation stage; and (5) a renewal stage.[3] Some general concepts involved in this set of five stages are as follows: First, there is no specified time frame in terms of a beginning point and an end point for each of the stages. Second, they do not necessarily flow only in the sequence shown. For example, it is possible to at any time recycle to the commitment stage, which in a sense runs throughout the entire cycle. Third, the sequence of five stages represents one cycle of activities and recycling is expected to go on continuously. That is, the process is not completed by passing through the set of five stages, but may be reentered at a variety of points. For example, it may be important to return to awareness, commitment, or some aspect of changeover as the school staff or clientele changes or as new problems arise. Finally, each stage within the sequence can be placed in the context of the planning strategy where interactive work between a process facilitator and a specific school results in implemented target programs as products of the activity.

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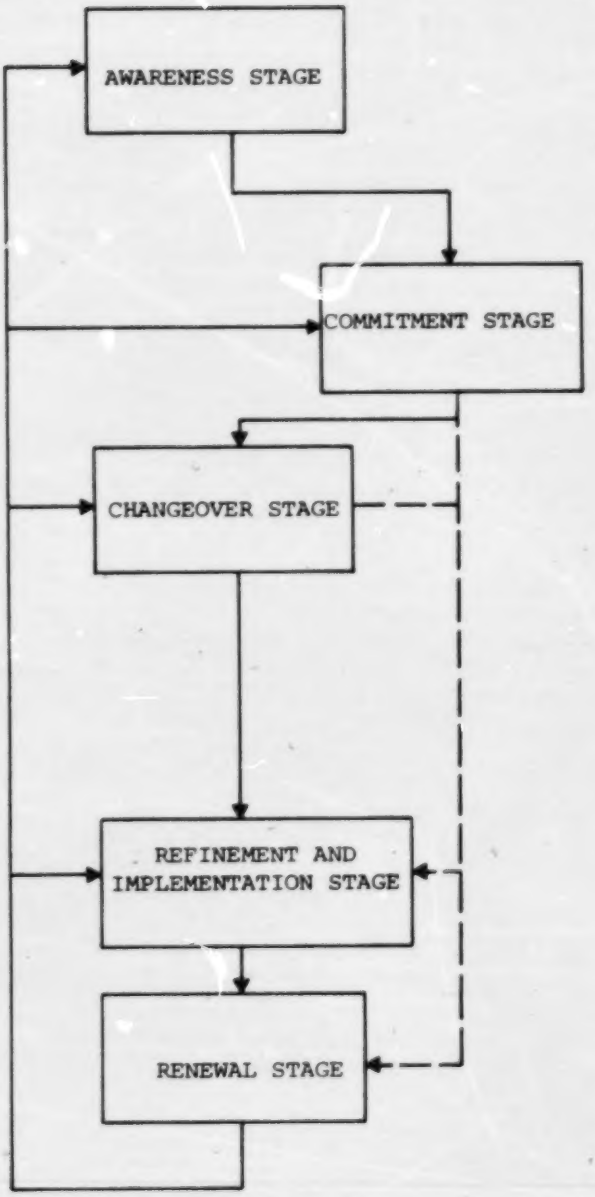
[2] A case study showing the application of the systematic change process to a Wisconsin Middle School is given in Struve et. al., 1976.

[3] This sequence of change is based on the Wisconsin Research & Development Center for Cognitive Learning approach to installing an IGE model in over 2,000 nation-wide elementary schools.



STAGE PURPOSES

- to emphasize the process that obtains answers rather than to provide answers
- to begin the involvement of people
- to initialize a working relationship that allows for dynamic modification
- to provide for inschool capabilities for continued change and improvement
- to cooperatively define a changeover plan
- to develop a school's target plan for individualization
- to refine the target plan into an installed and operating program
- to refine the implemented program as the beginning of a continuing search for solutions

Figure 6. Sequence of activities for change.

Awareness Stage

The awareness stage involves bringing together a process facilitator and a specific school wishing to do something about systematic change. We assume that the change process can only begin with a school in which there is a search for viable alternatives and some degree of dissatisfaction with the status quo. The school may exist at any point on a continuum from a strong traditional orientation to an open, innovative and individualized orientation.

During the awareness period two factors are emphasized. First, process skills are needed to obtain answers through systematic change. It is necessary to provide school personnel with the skills and techniques which will enable them to engage in a continuing search for solutions to problems which confront them. In the same vein, it is important to specify that there is not a set of "pat" answers for a particular school. The unique needs and conditions of a school will be best interpreted by the people who comprise the school community.

The second factor emphasized in awareness is that in the development and implementation process involvement of the persons who will be affected by any change program is essential. If the school wishes to undertake a series of change activities, it is essential that school personnel be involved in order to effectively develop answers that are most appropriate for that school.

At the organizational level, awareness involves meetings which present to school personnel the variety of ideas concerning the concepts, philosophy, and sequence of change, (the number of meetings to be determined by the particular school situation). The presentation is followed by a question-and-answer discussion. The goal of the awareness stage is to have school personnel perceive that they are ultimately responsible for the content of the change programs that are developed and implemented.

Commitment Stage

This stage is probably the most amorphous in the change sequence, yet it is important to identify and emphasize it as a separate activity. In one sense, commitment extends throughout the change sequence because although formal commitment may be made at some point in time, actual commitment is not maintained at a constant level. In keeping with a view of continuous progress which involves identifiable highs, lows, and plateaus, the authors believe that commitment is maintained over time only if the parties are obtaining the results they feel are necessary for achievement of their own personal goals and objectives. Therefore, while the commitment stage begins at some identifiable point, it must be given attention throughout the total cycle and sequence of change activities. It is operationalized most appropriately in terms of a series of negotiated agreements or contracts that specify for a period of time the roles of the school and the results that are to be obtained. The contract may be opened for

renegotiation at the end of the specified time period, or at any point during the time period. The model of contracting adopted here is the model frequently used between teachers and students in schools. Specifically, a series of goals and objectives are cooperatively laid out, mechanisms for reaching these goals and objectives and assessing their attainment are cooperatively defined, and a recycling process to determine a new set of goals and objectives takes place. Obviously, at some point in time during the change process the new set of goals and objectives may be of such a nature that the school and the process facilitator will become so divergent in their views that it is better to discontinue the process than to force it to conclusion. This is an inherent danger in any change process.

Changeover Stage

Changeover consists of three separate but interrelated activities which we believe are vital if a school is to achieve the ultimate goal of self-renewal for continuing change and improvement independent of a process facilitator. It is important to build or strengthen the capabilities of school personnel so that they can gradually assume the primary responsibility for planning and implementation of individualized solutions. In any school, the planning and implementation activities necessary to obtain desired results require both large group work and subsequent delegation to smaller groups of responsibility. Individuals within the school who possess the appropriate skills can provide leadership for the groups.

Training in conceptual knowledge. This training activity has as its purpose the development of a group of in-house, i.e., within school, personnel who have knowledge of the concepts and procedures related to the change process. The training activity is designed to impart an understanding of the planning process that is necessary in order to achieve a continuing change and improvement program in a school. This training is not only important to develop the in-house capability of the school staff, but is also necessary to provide a core of individuals who can work cooperatively to carry out the activities of the changeover, refinement and implementation, and renewal stages.

Training of process facilitators. The purpose of this training activity is also the development of capabilities within a school. However, the focus is not on enabling people to be participants in the planning but to be process facilitators for these activities. This training activity encompasses the conceptual knowledge, but goes beyond that by developing the specific skills and awareness necessary for individuals to play an active role in leading large and small groups through the planning as well as through the process of defining appropriate alternative practices for the school. A fundamental difference exists between a participant in a planning process and a facilitator of that process which requires facilitators to receive specific training for this role.

Changeover workshop. This activity involves planning by a group of individuals who cooperatively define and conduct a specific changeover workshop for the school. The group includes both persons who have received training in conceptual knowledge and as process facilitators, and interested persons from the school. It is important to include these various individuals in planning the workshop so that it can be tailored to the needs and requirements of the particular school. Through this planning activity an initial target program for subsequent implementation of the workshop is developed. The basic planning strategy is followed and the result is a school-specific workshop.

The all-school workshop has the two-fold purpose of (1) developing the school's initial target changeover plan, and (2) aiding school personnel in acquiring the planning/decision-making skills and the conceptual knowledge necessary in order for them to move toward institutionalizing a continuous change and improvement program. The general results to be obtained from the workshop are formulation of an initial school-wide plan for changeover along with a timeline of events. This workshop provides a means of obtaining total involvement on the part of school personnel. All personnel can be introduced to the process-oriented concepts of systematic change and can cooperatively define the specific programs they will attempt to implement during the forthcoming period.

Refinement and Implementation Stage

The purpose of this stage is to refine the target phase developed at the workshop in the context of the school's daily operations; to test a variety of alternatives specified in the plan; and finally to develop the management structures needed to operationalize the previously defined plans. During this crucial stage of the change process the new skills and concepts presented previously must be internalized and operationalized by those involved with the school. It is during this period that the unique structures and manifestations which are necessary to integrate the new concepts and approaches into the school's operating procedures are developed. It appears that this stage generally will involve the establishment of a variety of task forces to plan and carry out necessary details so that the generalized plans become a workable system that can be implemented, tested, evaluated, and refined. It also requires the adjustment and modification of the plans laid out in the workshop to practical day-to-day experience. Essentially, this is the theory-into-practice period which is crucial to the success of any change program in a secondary school.

Renewal Stage

The purpose of this stage is to further refine the original plans by moving toward a continuing change and improvement program for the school. This stage continues to utilize change process in a search

solutions to problems. The reality of constant change requires replanning that leads to recycling through the sequence of activities. As a result, this stage may lead to a new commitment, additional training, or another changeover stage in which a new set of plans for the school is developed and put into practice.

III

THE PURPOSE BASED TARGET SCHOOL

This chapter sets into a framework many of the concepts of change, planning, and movement of secondary schools toward individualized, personalized learning. The framework will utilize the notion of a purpose, a target, and movement toward that target over time, by integrating these notions into an idealized conceptualization of a target secondary school.

To reiterate, the notion of purpose as being the primary mission or aim of any group or organization is central to planning. Also central is relating purposes in a hierarchical manner to allow efforts and programs to be directed in terms of a specific purpose to be acheived as well as in terms of a hierarchical context that defines the overall operations of the secondary school. The framework which specifies the idealized target school is presented graphically in Figure 4. It should be noted that this chart is intended to be an illustration, not a prescription, of what a systematic change process might lead to if it is adopted by a school and followed over a period of time. Figure 4 in essence represents a conceptualization of how a secondary school might be organized to carry out the mandate of helping students to learn. Since this is a target school, it reflects the values and attitudes about education that the authors feel are both necessary and sufficient to provide individual students with the skills they will need to survive in the future. For any specific school, that school's own values and attitudes would have to be defined and included in such a framework.

AN IDEALIZED FRAMEWORK FOR A TARGET SCHOOL

At the top of Figure 4 are cited three main philosophies that shape the focus of the author's target: continuous progress, shared decision-making, and personalized learning. Continuous progress requires the recognition that each person has a unique pattern and rate of emotional, intellectual, and physical growth which is continuous but which has recognizable high, low, and plateau periods. Shared decision-making requires that each person to be affected by any decision ought to have the opportunity to be involved in the making of that decision. Finally, personalized learning requires individualized educational programs that provide for balanced emotional, intellectual and physical growth based on the needs, interests, and background of each student.

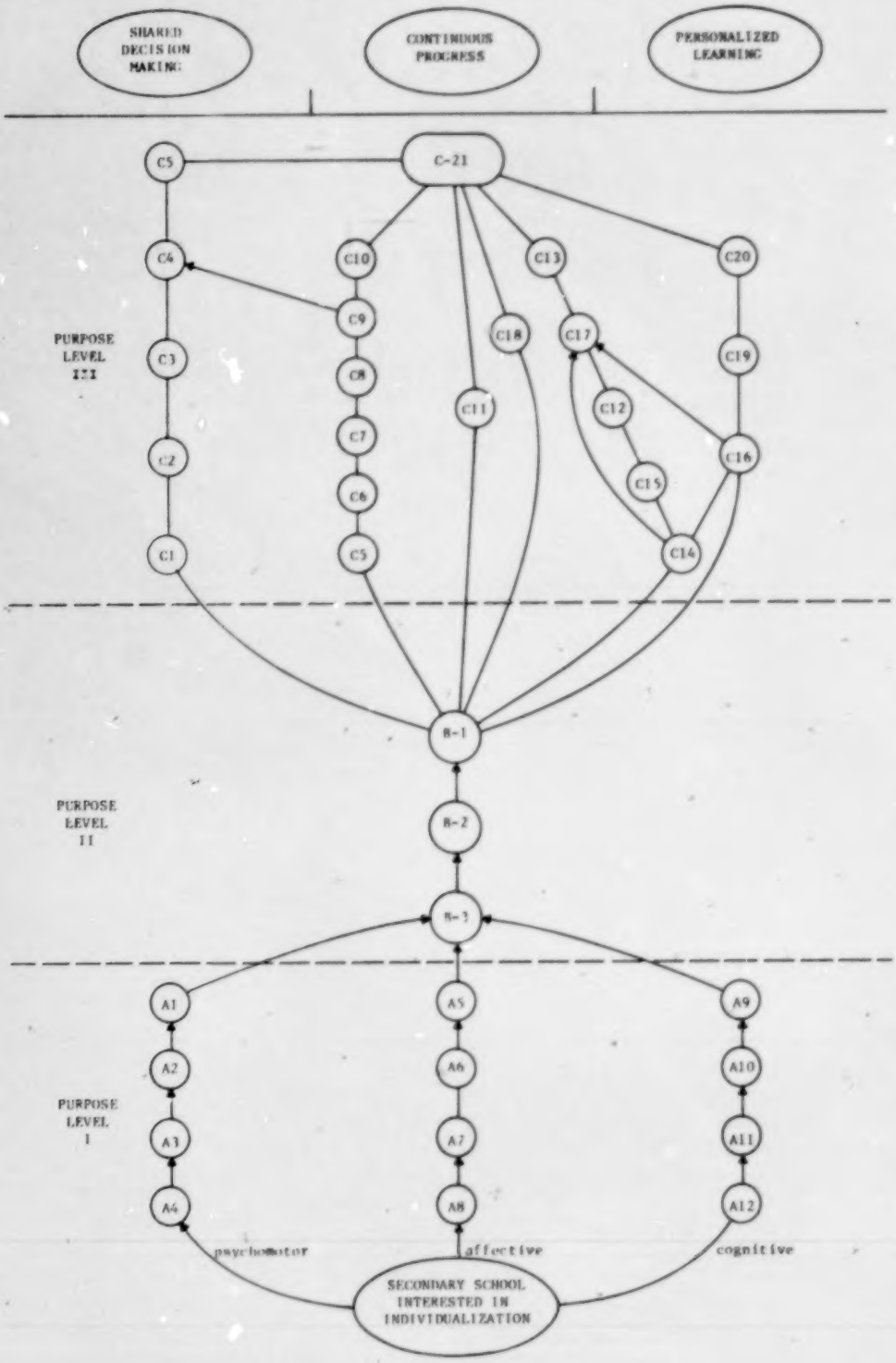


Figure 12. Target purpose milestones for an IGE/Secondary school

PURPOSE STATEMENTS FOR FIGURE 4

Stage A

A-1 to provide for the development of basic psychomotor skills in an individualized mode

A-2 to provide for school staff development in the psychomotor domain

A-3 to provide for the school/community development of psychomotor human outcomes for students

A-4 to provide awareness information on the need for individualized psychomotor education programs

A-5 to provide for the development of basic skills of communication, cooperation, understanding, and awareness of one's self

A-6 to provide for school staff development of programs for the affective arena of activities

A-7 to provide for the school/community development of affective human outcomes for students

A-8 to provide awareness information on the need for individualized affective education programs

A-9 to provide for the development of basic cognitive skills of reading, writing, and math in individualized modes

A-10 to provide for school staff development in the cognitive arena of activities

A-11 to provide for the school/community development of cognitive, human outcomes for students

A-12 to provide awareness information on the need for individualized cognitive educational programs

Stage B

B-1 to provide for the development of programs that tie together the three areas (cognitive, affective, and psychomotor) of knowledge around current issues of the day.

B-2 to provide for school planning staff development mechanisms to integrate the three areas: cognitive, affective and psychomotor

B-3 to provide for an awareness of the interrelationship between cognitive, affective, and psychomotor domains concentrating on the whole person

Stage C

C-1 to provide for learners to investigate alternative areas of interest at different levels, dance, practical motor skills

C-2 to provide for the development of psychomotor programs that focus on health aspects, movement development, relaxation, coordination

C-3 to provide for the development of psychomotor programs that focus on lifelong participation

C-4 to provide for students to develop a balanced and diversified approach to life

C-5 to provide for learners to investigate alternative range of affective topics at differing levels

C-6 to provide for the development of group programs where individuals explore relationships in terms of physiological and emotional development

C-7 to provide for the development of group programs where individuals explore a variety of value systems and structures

C-8 to provide for the development of group preventive therapy programs focusing on techniques and procedures for dealing with exploration of affective outcomes

C-9 to provide students with an expectation of the kinds of situations that may occur to them in their life (history)

C-10 to provide for students to develop responsibility for and control over their own lives and to have available a large repertoire of alternatives for a variety of circumstances

C-11 to provide for the development of interdisciplinary programs centered around human outcomes in a task achievement manner

C-12 to provide for students to integrate their learning in an application mode (do work and accomplish something)

C-13 to provide for the development of programs that enable students to develop interests around which life-long learning can be focused

C-14 to provide for learners to investigate alternative areas of interest at different levels

C-15 to provide for the development of experience-based programs enabling applications of individual knowledge to be made

Stage C (continued)

C-16 to provide students with capabilities of gathering information (know what is available or where to get information) and making decisions for daily lives

C-17 to provide for learners to pursue in-depth subject matter areas

C-18 to provide for the development of programs that enable students to dream and develop their imaginations about past and future possibilities

C-19 to provide students with applied skills for daily living (taxes, insurance, law, voting)

C-20 to provide for the development of programs that remove the mystique of interacting with professionals and social service agencies

C-21 to enable individuals to formulate their own life plans and effectively function in their own reality

The remainder of the chart consists of purpose statements, which reflect the programmatic missions or aims that we believe ought to be achieved by an idealized target school. It should be remembered from the planning process presented above that under each of these purpose statements, a variety of "Hows" e.g., how the purpose might be achieved, in the form of alternative practices could be listed as mechanisms for achieving each of these purposes. Furthermore, criteria levels stated in terms of measures of performance could be set for each of these purposes to allow for differing levels of attainment and thereby enable programs to be carried out in a continuous progress manner from 6th grade all the way through 12th grade. Finally, for each of these purposes a complete target could be delineated for each of the criteria levels that are necessary for students to make the transition to adulthood between a 6th grade entry point and a 12th grade exit point. A secondary school which implements specific programs that encompass these factors would be well on the way to operationalizing the philosophies of continuous progress, shared decision-making, and personalized learning. Figure 4 shows three purpose levels that reflect in a general sense the movement that a school could make over a period of time. However, it should be noted that the relationships (shown by the arrows) do not indicate a sequence. Rather, they specify a hierarchical arrangement that is part of the purpose-based planning process presented earlier. In the same sense that each statement on the chart reflects a purpose to be achieved, each of the levels has the following, more generalized purpose:

1. The purpose of Level I is: develop the abilities of a school community, including students, teachers, parents, and administrators to work with the emotional, intellectual, and physical areas of each student's growth.

2. The purpose of Level II is: develop the ability of the school, again including all personnel, to integrate areas of each student's emotional, intellectual and physical growth into the daily programmatic operations.

3. The purpose of Level III is: apply instructional strategies using a balance from the three areas of student growth, to attain the competencies that are deemed necessary for the student to make a successful transition to adulthood.

In Figure 4 the culminating purpose is given at the top: "To provide individuals with the ability to formulate their own life plans and to effectively function in their own life's reality (C-21)." Consequently, the framework presented here reflects the authors' values and attitudes for secondary schools and attempts to tie together all of the concepts of change, from purposes to measures of effectiveness, to targets, to alternative practices, to timelines.

Operationalizing the Target School

While Figure 4 reflects an idealized target school in terms of

purposes, there are additional factors that are part of the change process which would enable a particular school to move from describing an idealized target on paper to actually operating a school that provides the kinds of programs necessary to achieve the purposes.

First, the school would develop a school-specific chart such as that shown in Figure 4, and subsequently would work cooperatively to plan, develop, test, and implement the relevant factors under each identified purpose in order that the purposes specified are reflected in the operating reality of the school. In this sense, the planning strategy is the anchor point for having the school personnel develop target programs for each of the identified purposes. Second, a technical assistance program aimed at aiding the school in a given stage would require a particular emphasis. For example, to achieve the higher level concern specified for Level I of a balanced approach to student growth in terms of the physical, intellectual, and emotional areas it appears necessary to have specific programs developed and operated for each of these areas. In this way, school personnel will be able to develop skills and expertise in each of the areas before moving to integrate them in a more balanced approach. Also, the process mechanisms necessary for individualization of learning can be developed and practiced in a less complex situation.

For each of the three lines, moving upward in Level I, where a given line represents either the physical (A5-A8), intellectual (A9-A12), or the emotional (A1-A4) aspect similar processes are carried out. Awareness activities for each area are conducted and geared toward achieving involvement of the entire school community in determining student outcomes that are desirable for that school. Staff development programs are necessary to assist in the acquisition of new skills, knowledge, and procedures which are required to operate individualized programs. Practice in the application of these new skills is attained by implementing programs that are designed to achieve the previously specified outcomes. Consequently, a school starting with no previous experience in the different areas of individualization could develop target programs for Level I and operate these programs for a defined period of time that is agreeable to those involved.

During Level II, the emphasis would be placed on integrating the three areas of student growth to achieve an appropriate integrative balance between the physical, emotional, and intellectual factors involved with each and every student. Level II employs a structure similar to that employed in Level I, but the emphasis is on the integration of the three areas of growth. The same kinds of awareness activities are necessary: staff development to integrate these areas and the experience of applying the new knowledge and skills in actual ongoing programs for a specified period of time. It is possible, and likely, that differing schools will enter such a conceptualization at differing points. Numerous schools already have highly individualized cognitive programs in operation. Some schools have aspects of the emotional and physical programs operating in an individualized format. A few schools have achieved at least some integration of the three areas in ongoing programs.

For both Levels I and II, educational research and development have provided a wide range of alternative practices and procedures to help fulfill any and all of the purposes specified. Level III however, presents a greater problem because it is an idealized representation of competencies that are deemed necessary for students to make a successful transition to adulthood. It is based upon the assumption that the development of these competencies will take place in a balanced manner, drawing upon aspects of the intellectual, physical, and emotional growth of each student. Secondary schools as they exist today have little experience in dealing with such a program. There are some secondary schools currently operating that are attempting to provide for some of the purposes specified in Level III, but no school covers the spectrum represented here. Nor do there exist a multitude of practices that cover the procedures and skills that teachers will need if they are to develop programs necessary to achieve the Level III purposes. However, we believe that by following the planning process, teachers and administrators can develop the specific programmatic alternatives that will be necessary to make Level III an ongoing reality in secondary education.

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